

12

EUROPEAN PATENT APPLICATION

21 Application number: **88309217.3**

51 Int. Cl.⁵: **C11D 3/37, C08G 63/68,**
C08G 63/66

22 Date of filing: **04.10.88**

30 Priority: **05.10.87 US 105421**

43 Date of publication of application:
12.04.89 Bulletin 89/15

84 Designated Contracting States:
AT BE CH DE FR GB GR IT LI LU NL SE

88 Date of deferred publication of the search report:
07.11.90 Bulletin 90/45

71 Applicant: **THE PROCTER & GAMBLE**
COMPANY
One Procter & Gamble Plaza
Cincinnati Ohio 45202(US)

72 Inventor: **Maldonado, Rene**
11-7 Bennett Place
Holland, PA 18966(US)
Inventor: **Trinh, Toan**
8671 Creekwood Ln.
Maineville Ohio 45039(US)
Inventor: **Gosselink, Eugene Paul**
3754 Susanna Drive
Cincinnati Ohio 45239(US)

74 Representative: **Brooks, Maxim Courtney et al**
Procter & Gamble (NTC) Limited Whitley
Road Longbenton
Newcastle-upon-Tyne NE12 9TS(GB)

54 **Sulfoaroyl end-capped ester oligomers suitable as soil-release agents in detergent compositions and fabric-conditioner articles.**

57 Anionic, especially sulfoaroyl, $\text{NaO}_3\text{S}(\text{C}_6\text{H}_4)\text{C}(\text{O})-$ preferred, end-capped esters useful as soil release agents in detergent compositions and fabric-conditioner articles. The terephthalate esters contain unsymmetrically substituted oxy-1,2-alkyleneoxy units (oxy-1,2-propyleneoxy units preferred).

EP 0 311 342 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
P,X	US-A-4 764 289 (THE PROCTER & GAMBLE CO.) * Column 2, lines 41-54; column 3, lines 19-65; column 4, line 55 - column 26, line 20; claims 1,3-12,14-20 * ---	1-5	C 11 D 3/37 C 08 G 63/68 C 08 G 63/66
A	US-A-4 554 328 (S.M. SINKER) * Complete * ---	1,4-6	
A	US-A-4 132 680 (Ch.H. NICOL) * Abstract; column 1, line 16 - column 4, line 34; column 8, line 54 - column 10, line 9 * ---	1,7-10	
A	US-A-4 525 524 (W.C.T. TUNG) * Complete * ---	1	
A	US-A-3 734 874 (Ch.J. KIBLER et al.) * Column 1, line 49 - column 9, line 55 * ---	1	
A	EP-A-0 066 944 (ICI AMERICAS INC.) * Abstract * ---	1	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	EP-A-2 236 926 (RHONE-PROGIL) * Page 1, line 1 - page 6, line 18; page 9, line 1 - page 15, line 12 * -----	1	C 11 D C 08 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20-08-1990	Examiner FISCHER W.H.F.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	